



MSHA's Accident Prevention Program Safety Idea

Safety and
Health are
Values!

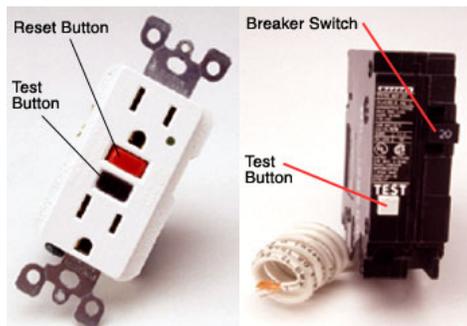
Ground Fault Circuit Interrupters (GFCI)

Category : **Electrical**

Mine Type: **All Mines**

Many commercial and residential establishments use Ground Fault Circuit Interrupters (GFCI's) to prevent electrical shock. The way GFCI's work is by sensing when current traveling through the hot conductor is not returning via the neutral conductor. This prevents humans from conducting current to ground.

GFCI's can also assist in identification of faults if used in mine equipment control circuits. If a cable's insulation erodes due to vibration and the hot conductor contacts the frame of the enclosure, a properly installed GFCI outlet or circuit breaker can isolate the circuit in which the fault occurred and protect personnel from electrical shock.



GFCI outlets and circuit breakers like those pictured are relatively inexpensive and simple to install. Don't you think it's time you take advantage of the safety afforded by GFCI's?

Note: substitution of components that affect permissibility must be pre-approved by MSHA.

If you have a tip you would like to pass on, you can e-mail it to MinersTips@msha.gov. If your tip is selected, you will receive credit in this space.

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